

DEPARTMENT of ENVIRONMENTAL SERVICES
Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

| | | |
|------------------------------|------------------------------------|---------------|
| Lake: DAMON RESERVOIR, UPPER | Lake Area (ha): | 29.91 |
| Town: RINDGE | Maximum depth (m): | 1.2 |
| County: Cheshire | Mean depth (m): | 0.5 |
| River Basin: Connecticut | Volume (m ³): | 155000 |
| Latitude: 42°44' N | Relative depth: | 0.2 |
| Longitude: 72°05' W | Shore configuration: | --- |
| Elevation (ft): 913 | Areal water load (m/yr): | 49.58 |
| Shore length (m): --- | Flushing rate (yr ⁻¹): | 95.70 |
| Watershed area (ha): 2720.5 | P retention coeff.: | 0.36 |
| % watershed ponded: 2.2 | Lake type: | natural w/dam |

BIOLOGICAL:

27 January 1988

9 September 1987

| | | |
|------------------------------------|---------------------|---------------------|
| DOM. PHYTOPLANKTON (% TOTAL) #1 | NO SAMPLE COLLECTED | NO SAMPLE COLLECTED |
| #2 | | |
| #3 | | |
| PHYTOPLANKTON ABUNDANCE (cells/mL) | | 1640.0 |
| CHLOROPHYLL-A (µg/L) | | 12.45 |
| DOM. ZOOPLANKTON (% TOTAL) #1 | NO SAMPLE COLLECTED | NO SAMPLE COLLECTED |
| #2 | | |
| #3 | | |
| ROTIFERS/LITER | | |
| MICROCRUSTACEA/LITER | | |
| ZOOPLANKTON ABUNDANCE (#/L) | | |
| VASCULAR PLANT ABUNDANCE | | Common |
| SECCHI DISK TRANSPARENCY (m) | | 1.2 |
| BOTTOM DISSOLVED OXYGEN (mg/L) | 13.3 | 6.1 |
| BACTERIA (fecal col., #/100 ml) #1 | | < 10 |
| #2 | | |
| #3 | | |

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None
Hypolimnion volume (m³): None

CHEMICAL:Lake: DAMON RESERVOIR, UPPER
Town: RINDGE

| | 27 January 1988 | | 9 September 1987 | | |
|-------------------------------|-----------------|--|------------------|--|--|
| DEPTH (m) | 1.0 | | 0.5 | | |
| pH (units) | 5.3 | | 5.6 | | |
| A.N.C. (Alkalinity) | 1.4 | | 1.1 | | |
| NITRATE NITROGEN | 0.12 | | 0.07 | | |
| TOTAL KJELDAHL NITROGEN | 0.57 | | 0.34 | | |
| TOTAL PHOSPHORUS | 0.024 | | 0.040 | | |
| CONDUCTIVITY (μ mhos/cm) | 72.6 | | 52.8 | | |
| APPARENT COLOR (cpu) | 95 | | 104 | | |
| MAGNESIUM | | | 0.48 | | |
| CALCIUM | | | 1.6 | | |
| SODIUM | | | 6.9 | | |
| POTASSIUM | | | 0.60 | | |
| CHLORIDE | 14 | | 5 | | |
| SULFATE | 6 | | < 1 | | |
| TN : TP | 29 | | 10 | | |
| CALCITE SATURATION INDEX | | | 5.5 | | |

All results in mg/L unless indicated otherwise

TROPHIC CLASSIFICATION: 1987

D.O. S.D. PLANT CHL TOTAL CLASS

| | | | | | |
|----|---|---|---|---|--------|
| ** | 3 | 2 | 3 | 8 | Eutro. |
|----|---|---|---|---|--------|

COMMENTS:

1. Green algae made up 75% of the whole-water phytoplankton. Tiny green flagellates (40%) and Ankistrodesmus (15%) were the dominant genera.
2. Water was a dark tea color.
3. No winter or summer net plankton samples were collected because the water depth was too shallow.

Upper Damon Reservoir

Rindge

WSPCD - 1987
sounded by fathometer
all <5 feet
(4 ft. maximum depth)

X₄'



0 .1 km

FIELD DATA SHEET

LAKE: DAMON RESERVOIR, UPPER TOWN: RINDGE

TOWN: RINDGE

DATE: 09/09/87

WEATHER: PARTLY SUNNY

[illegible]

SECCHI DISK (m): 1.2

COMMENTS:

BOTTOM DEPTH (m): 1.3

TIME: 1235

*Dissolved oxygen values are in mg/L

Upper Damon Reservoir

Rindge

AQUATIC PLANTS
9 SEP. 1987



[illegible]